

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014857**Date Inspected:** 02-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Li Young

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**Segment Trial Assembly**

This QA Inspector observed ZPMC welder Mr. Han Yiaofeng, stencil 054467 is using shielded metal arc procedure WPS-345-SMAW-2G(2F)-Repair-1 to make repair weld FB027-008-128 on OBG Segment 7DW near where cross beam CB8 will be attached. These repair welds are being made as a result of ultrasonic rejections at Y=80mm, Y=220mm and Y=320mm, reference weld repair documents WR13361 and WR13362. This QA Inspector measured a welding current of approximately 160 amps and Mr. Han Yiaofeng appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liu Houkuan, stencil 045133 is using shielded metal arc procedure WPS-345-SMAW-3G(2F)-Repair-1 to make various repair welds on "T" stiffener plates on OBG Segment 8BW cross beam side plates near panel point PP67 adjacent to where OBG Segment 8CW will be attached. These repair welds appear to be the result of visual rejections. This QA Inspector measured a welding current of approximately 160 amps and Mr. Han Yiaofeng appears to be certified to make this weld. This QA Inspector used

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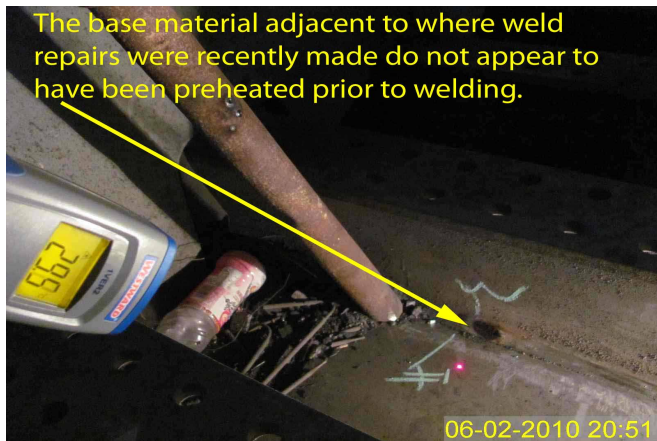
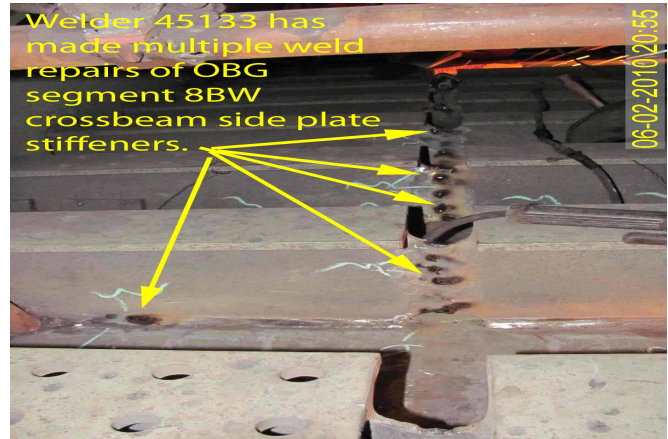
## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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an infrared thermometer to measure the base material adjacent to where Mr. Liu Houkuan had completed several weld repairs and the base material does not appear to have been preheated prior to welding. This QA Inspector informed ZPMC CWI Mr. Li Young that these welds appear to have been made without the base material being preheated prior to welding. Mr. Li Young informed this QA Inspector that he had been informed that no welding would be performed in these locations and that he was not aware that this welding was taking place. Mr. Li Young said the weld material will be ground off and new weld material will be applied and the areas will be MT inspected.

Items observed on this date do not fully appear to comply with applicable contract documents. See the photographs below for additional information.



### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul
<b>Reviewed By:</b>	Carreon,Albert

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Quality Assurance Inspector
QA Reviewer

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